Nokia Customer Care
RM-8 Series Transceivers

1 - General Information

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RM-8/RM-47/RM-48 Product Selection

The RM-8/RM-47/RM-48 is a triple band transceiver unit designed for the GSM850, EGSM900 and GSM1800/1900 networks. It is both GSM850 and EGSM900 phase 2 power class 4 transceiver (2W) and GSM1800/GSM1900 power class 1 (1W) transceiver.

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RM-8/RM-47/RM-48 Product and Modules

Table 1: RM-8 product and modules

Name	Type code	Material code/ module type	Module code
Basic transceiver	RM-8	0513674	
RF/System module	1DN		0202334
Upper block module	1DS		
Mechanics module			0267004

Table 2: RM-47 product and modules

Name	Type code	Material code/ module type	Module code
Basic transceiver	RM-47	0518037	
RF/System module	1DN		0202487
Upper block module	1DS		
Mechanics module			0267058

Table 3: RM-48 product and module

Name	Type code	Material code/ module type	Module code
Basic transceiver	RM-48	0518036	
RF/System module	1DN		0202486
Upper block module	1MN		0202629
Mechanics module			0267061

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Figure 1:RM-8/RM-47/RM-48 transceiver

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Accessories List

Batteries
Battery BL-4C 760mAh Li-ion
Chargers
Standard Charger ACP-7E (EUR) 230 Vac (Made in country)
Standard Charger ACP-7E (EUR) 230 Vac (Made by ‘manufacturer’)
Standard Travel Charger ACP-7U (US) 120 Vac (Made in country)
Standard Travel Charger ACP-7U (US)120 Vac (Made by ‘manufacturer’)
Standard Charger ACP-7X (UK) 230 Vac (Made in country)
Standard Charger ACP-7X (UK) 230 Vac (Made by ‘manufacturer’)
Standard Charger ACP-7H (Hong Kong) 200 Vac
Standard Charger ACP-7C (China) 220 Vac
Standard Charger ACP-7C (Philippines) 220 Vac
Standard Charger ACP-7A (Australia) 240 Vac
Standard Travel Charger ACP-7AR (Argentina) 220 Vac
Travel Charger ACP-12E (Eur)
Travel Charger ACP-12X
Travel Charger ACP-12U
Travel Charger ACP-12UB
Travel Charger ACP-12G
Travel Charger ACP-12C
Travel Charger ACP-12A
Travel Charger ACP-12AR
Retractable Charger AC-1E
Portable and Office Accessories
Fashion Stereo Headset HS-3
Boom Headset HDB-4
Headset HS-5
Inductive Loopset LPS-4

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Connectivity Adapter Cable DKU-2
Music Stand MD-1
Wireless Audio Adapter AD-5B
Mobile Accessories
Headrest Handsfree BHF-3
Mobile Charger LCH-12
Plug-in Car HandsfreeHF-3
Other Accessories
Image Viewer SU-5
Image Album PD-1
Image Frame SU-4
Image Frame SU-7
Kaleidoscope I RX-11
Medallion I RX-3
Medallion II RX-4
Remote Camera PT-6

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Technical Specifications

General specifications of transceiver RM-8/RM-47/RM-48

Unit	Dimensions (mm) (W x H x D)	Weight (g)	Volume (cm^3)
Transceiver with BL-4C 760mAh Li-Ion battery pack	88 x 46 x 22	121	78

Table 4:

Parameter	Unit and value
Cellular system RM-8/RM-47/ RM-48	EGSM900/GSM1800/GSM1900 GSM850/GSM1800/GSM1900
RX Frequency range	GSM850: 869 ... 894 MHz EGSM900: 925 ... 960 MHz GSM1800: 1805...1880 MHz GSM1900: 1930...1990 MHz
TX Frequency range	GSM850: 824 ... 849 MHz EGSM900: 880 ... 915 MHz GSM1800: 1710 ...1785 MHz GSM1900: 1850 …1910 MHz
Duplex spacing	GSM850: 45 Mhz EGSM900: 45 MHz GSM1800: 95 MHz GSM1900: 80 MHz
Channel spacing	200 kHz
Number of RF channels	GSM850: 124 EGSM900: 174 GSM1800: 374 GSM1900: 300
Output Power	GSM850: GSMK 5...33dBm GSM850: 8-PSK 5...27dBm EGSM900: GSMK 5…33 dBm EGSM900: 8-PSK 5…27 dBm GSM1800: GSMK 0…30 dBm GSM1800: 8-PSK 0…26 dBm GSM1900: GSMK 0…30 dBm GSM1900: 8-PSK 0…26 dBm

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Table 4:

Number of power levels GMSK	GSM850: 15 EGSM900: 15 GSM1800: 16 GSM1900: 16
Number of power levels 8-PSK	GSM850: 12 EGSM900: 12 GSM1800: 14 GSM1900: 14

Sensitivity, static channel (+25°C)	GSM850: -102dBm EGSM900: -102dBm GSM1800: -102dBm GSM1900: -102dBm
Frequency Error, static channel	< 0.1 ppm
RMS Phase Error	< 5.0°
Peak Phase Error	< 20.0°

Battery endurance

Parameter	Hours	Note
talk time (hours)	up to 2-4	
standby (hours)	up to 120-270	Depends on network parameters

Environmental conditions

Table 5: Allowed Ambient Temperatures

Environmental condition	Ambient temperature	Notes
Normal operation	-10 ^{o}C ... +55 ^{o}C	Specifications fulfilled
Reduced performance	+55 ^{o}C ... +65 ^{o}C	Operational only for short periods
Intermittent operation	-20 ^{o}C ... -10 ^{o}C and +65 ^{o}C ... +85 ^{o}C	Operation not guaranteed but an attempt to operate will not damage the phone
No operation	-40 ^{o}C ... -20 ^{o}C	Operation not possible but an attempt to operate will not damage the phone
No operation or storage	< -40 ^{o}C and > +85 ^{o}C	No storage; an operation attempt may cause permanent damage

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Charging allowed	-25 ^{o}C ... +60 ^{o}C	
Long term storage conditions	0 ^{o}C ... +40 ^{o}C	

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Transceiver features

Hardware characteristics

- Protocols: GSM850/EGSM900/GSM1800/1900
- Codecs: AMR, HR, FR, EFR
- Main display: up to 65.536 colors, 128 x 160 pixels, active area 31.7 x 38.9mm.
- Integrated VGA camera, up to 640 x 480 pixels.
- FM stereo radio (only in RM-8)
- Keys: scroll keys, 3 soft keys, send, end and character keys
- Side keys: power, push to talk/voice and volume keys
- Vibra
- Integrated handsfree speaker
- Interfaces: DC charger plug, Pop-Port connector and IrDA

UI features

- EDGE (EGPRS): MSC 10 (RX+TX 4+1, 3+2)
- GPRS: MSC 10 (RX+TX 4+1, 3+2)
- IR
- DKU-2 USB cable (connectivity via Pop-Port <tm>) up to 230.4 kbit/s

- PC Dial-up connectivity

- PC Suite connectivity

- Enhanced UI features on colour mini display with wallpapers, screen savers, colour schemes, soft indicators and signal and battery bars

Other features

- 3GPP spec camcorder and video player
- View finder selectable for mini display - take a picture of yourself!
- Video streaming
- Support of AAC, MP3 and AMR ringing tone clips
- Voice commands, voice dialing and voice recording
- User configurable softkey
- Calendar
- To-do list and Notes
- Alarm clock
- Countdown timer (usable also from idle mode)
- Colour schemes matching overall colour theme
- Incoming call animation

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Electrical characteristics

Table 6: Absolute Maximum Ratings

Parameter	Min.	Typical	Max.	Unit
Battery Voltage, Idle	-0.3		5.5	V
Battery Voltage, Call	-0.3		4.8	V
Charger Input Voltage	-0.3		16	V
Charging Current			1	A

Table 7: Supply Voltages

Parameter	Min.	Typical	Max.	Unit / Notes
Battery Voltage	3.1	3.7	4.2	V / SW cut-off 3.2 V

Table 8: Current Consumption

Condition	Min.	Typical	Max.	Unit
Call (MoU) GSM850 EGSM900 GSM1800 GSM1900		 300 300 220 210		mA
Idle (MoU)		3-4		mA
Power off			200	µA

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